



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/932,539

08/17/2001

Gavin J. McIntosh

FMCE-P064

3957

7590

06/15/2005

Henry C. Query, Jr.
504 S. Pierce Ave.
Wheaton, IL 60187

EXAMINER

BOMAR, THOMAS S

ART UNIT

PAPER NUMBER

3672

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,539

Applicant(s)

MCINTOSH, GAVIN J.

Examiner

Shane Bomar

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/15/2005 has been entered.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 3,604,731 to Petersen.

Regarding claim 1, Petersen discloses a production Christmas tree comprising a generally vertical production bore 24 (see Fig. 4 and col. 1, lines 17-23); a first production outlet 28 which includes a first end that is connected to the production bore 24 and a second end 29 that extends away from the production bore; and at least second and third production outlets 49 that each extend from the second end 29 of the first production outlet 28 (see Figs. 1, 4, 6, and 7), wherein in the normal production mode, fluid flowing through the first production outlet is produced through any one of the second and third outlets or through both of the second and third outlets simultaneously (see col. 2, line 73 through col. 3, line 5).

Regarding claim 2, each of the second and third outlets has a different diameter (see col. 3, lines 22-24).

Art Unit: 3672

4. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 6,196,310 to Knight.

Regarding claim 1, Knight discloses a production Christmas tree comprising a generally vertical production bore 31 (see Fig. 1 and col. 1, lines 39-41); a first production outlet which includes a first end that is connected to the top end of production bore 31 and a second end that extends away from the production bore into separator 28; and at least second and third production outlets 33, 35, or 92 that each extend from the second end of the first production outlet (see Figs. 1 and 1a), wherein in the normal production mode, fluid flowing through the first production outlet is produced through any one of the second and third outlets or through both of the second and third outlets simultaneously (see col. 3, line 62 through col. 4, line 9).

Regarding claim 7, each of the second and third production outlets has a respective valve (see Figs. 1 and 1a, and col. 4, lines 49-54).

Claim Rejections - 35 USC § 103

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen.

Petersen teaches the production Christmas tree of claim 1 that includes second and third production outlets. It is not expressly taught what the exact outer diameters of the second and third production outlets are. However, the sizing of an outlet is based on a myriad of variables, as is well known in the art. Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the outlets of Petersen to the currently claimed diameters as specifically called for in claims 4 and 5, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves only routine skill in the art. In re Aller, 105 USPQ 233.

Art Unit: 3672

6. Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight.

Knight teaches the production Christmas tree of claim 1 that includes second and third production outlets. It is not expressly taught what the exact outer diameters of the second and third production outlets are. However, the sizing of an outlet is based on a myriad of variables, as is well known in the art. Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the outlets of Petersen to the currently claimed diameters as specifically called for in claims 4 and 5, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves only routine skill in the art. In re Aller, 105 USPQ 233.

7. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen in view of US patent 5,544,707 to Hopper et al.

Regarding claims 6 and 8, Petersen teaches a Christmas tree, as shown with regard to claim 1 above, that includes a vertical production bore 24 with multiple production outlets 28 connected to the production bore (see Figs. 4 and 7). However, it is not expressly taught that the tree is a horizontal Christmas tree.

Hopper et al teach a Christmas tree similar to that of Petersen. It is further taught that the tree is a horizontal Christmas tree since the production tubing is hung in the wellhead housing (see Fig. 2 and the Summary of the Invention). It would have been obvious to one of ordinary skill in the art, having the teachings of Petersen and Hopper et al before him at the time the invention was made, to modify the Christmas tree taught by Petersen to include the horizontal tree of Hopper et al, in order to obtain a tree that takes the place of a conventional tree and has a large vertical through bore without any internal valves (see col. 2, lines 3-9 of Hopper et al).

One would have been motivated to make such a combination since Petersen's invention does not rely on the type of tree being used and because the combination would provide advantages with respect to safety and operation benefits not found in conventional trees, as taught by Hopper et al.

Regarding claims 7 and 13, the combination applied to claims 6 and 8 above can analogously be applied to these claims, wherein Hopper et al show that production outlets notoriously have respective valves like valve 70 (see Fig. 2 and col. 7, lines 6-9).

Regarding claim 9, the combination applied to claim 8 above further teaches that each production outlet has a different diameter (see col. 3, lines 22-24 of Petersen).

Regarding claim 10, the combination applied to claim 8 above further teaches that there are two said outlets 49 (see Fig. 6 of Petersen).

Regarding claims 11 and 12, the combination applied to claim 10 above further teaches that one outlet is inherently 7 inches while the other outlet is inherently 5 inches based on the fact that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves only routine skill in the art (see the rejection of claims 4 and 5 above).

8. Claims 6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight in view of Hopper et al.

Regarding claims 6 and 8, Knight teaches a Christmas tree, as shown with regard to claim 1 above, that includes a vertical production bore 31 with multiple production outlets 33, 35, or 92 connected to the production bore (see Figs. 1 and 1a). However, it is not expressly taught that the tree is a horizontal Christmas tree.

Art Unit: 3672

Hopper et al teach a Christmas tree similar to that of Knight. It is further taught that the tree is a horizontal Christmas tree since the production tubing is hung in the wellhead housing (see Fig. 2 and the Summary of the Invention). It would have been obvious to one of ordinary skill in the art, having the teachings of Knight and Hopper et al before him at the time the invention was made, to modify the Christmas tree taught by Knight to include the horizontal tree of Hopper et al, in order to obtain a tree that takes the place of a conventional tree and has a large vertical through bore without any internal valves (see col. 2, lines 3-9 of Hopper et al). One would have been motivated to make such a combination since Knight's invention does not rely on the type of tree being used and because the combination would provide advantages with respect to safety and operation benefits not found in conventional trees, as taught by Hopper et al.

Regarding claims 9, 11, and 12, the combination applied to claim 8 above further teaches that one outlet is inherently 7 inches while the other outlet is inherently 5 inches based on the fact that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves only routine skill in the art (see the rejection of claims 2, 4, and 5 above).

Regarding claim 10, the combination applied to claim 8 above further teaches that there are two said outlets (see Figs. 1 and 1a of Knight).

Regarding claim 13, the combination applied to claim 8 above further teaches that each production outlet has a respective valve (see Figs. 1 and 1a, and col. 4, lines 49-54 of Knight).

Art Unit: 3672

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bartlett et al, Hesh, Lima, and Reitz teach other production outlet configurations of interest.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Bagnell
Supervisory Patent Examiner
Art Unit 3672

tsb 
June 8, 2005